

# Trust in international organizations: An empirical investigation focusing on the United Nations

Benno Torgler

Received: 16 May 2006 / Revised: 9 February 2007 / Accepted: 17 March 2007 /  
Published online: 17 May 2007  
© Springer Science + Business Media, LLC 2007

**Abstract** The literature on social capital has strongly increased in the last two decades, but there still is a lack of substantial empirical evidence about the determinants of international trust. This empirical study analyzes a cross-section of individuals, using micro-data from the World Values Survey, covering 38 countries, to investigate trust in international organizations, specifically in the United Nations. In line with previous studies on international trust we find that political trust matters. We also find that social trust is relevant, but contrary to previous studies the results are less robust. Moreover, the paper goes beyond previous studies investigating also the impact of geographic identification, corruption and globalization. We find that a higher level of (perceived) corruption reduces the trust in the UN in developed countries, but increases trust in developing and transition countries. A stronger identification with the world as a whole also leads to a higher trust in the UN and a stronger capacity to act globally in economic and political environment increases trust in the UN.

**Keywords** International organizations · United Nations · International trust · Political trust · Social trust · Corruption · Globalization

**JEL** Codes Z130 · D730 · O190

---

B. Torgler  
School of Economics and Finance, Queensland University of Technology, GPO Box 2434,  
Brisbane, QLD 4001, Australia

B. Torgler (✉)  
CREMA—Center for Research in Economics, Management and the Arts, Basel, Switzerland  
e-mail: benno.torgler@qut.edu.au

## 1 Introduction

Social capital has been studied by many different disciplines. It has advanced to an important concept in social sciences, enforcing the interdisciplinary discourse between researchers and policy makers and non-academic institutions such as the World Bank with its Social Capital Initiative on the other hand. Moreover it also encouraged the discussion within the single disciplines (see Woolcock 1998). Many authors have singled out social capital as an important feature of productive social relationships (Gambetta 1988; Hardin 1993) and effective governance facilitating also coordinated actions and the willingness to comply (see, e.g., Putnam 1993; Alesina and La Ferrara 2002; Knack and Keefer 1997; La Porta et al. 1999; Knack 1999; Zak and Knack 2001 and Schaltegger and Torgler 2007; Torgler 2007).<sup>1</sup> However, Brewer et al. (2004) point out that “To date, no research has directly studied international trust” (p. 94). The authors stress the relevance of scholars casting their attention not just on the familiar forms of trust, but on other forms as well. Political scientists have also shown that public opinion about world affairs can influence voting behavior and public policy (Aldrich et al. 1989 and Shapiro and Jacobs 2000). To measure international trust Brewer et al. (2004, 2005) use the following questions: *Generally speaking, would you say that the United States can trust other nations, or that the United States can't be too careful in dealing with other nations? Would you say that most of the time other nations try to be helpful to the United States, or that they are just looking out for themselves?* Thus, the authors extend previous studies that focused on *generalized trust* by including an *international dimension*. In a similar approach we extend the previous studies and focus on individuals' trust in *international organizations*. Trust in international organization can be seen as a sub-category of international trust. It is connected to particularized trust relying in our case strongly on experiences with the United Nations (or knowledge about such experiences). Contrary to Brewer et al. (2004, 2005) who used US data our data set from the World Values Survey wave III (1995–1997) covers 38 countries. Moreover, we do not focus on the general level of international trust but rather on a particular international institution, namely the United Nations. The UN include 191 sovereign states, representing virtually every country in the world, and therefore are a global association of governments aiming at facilitating co-operation in international law, international security, economic development, and social equity (see <http://www.un.org/>).<sup>2</sup> It is highly relevant to investigate what shapes the confidence in the UN, as such international institutions have received substantial and increased attention in the debates over world affairs (Brewer et al. 2004). As the next section will show we also try to extend the previous empirical model investigating factors such as corruption, geographic identification and globalization. In addition, we are also going to investigate different dimensions of political trust instead of focusing only on trust in the

<sup>1</sup> For an overview about the topic social capital and politics see also Jackman and Miller (1998).

<sup>2</sup> It should be noted that Switzerland and Serbia, included in our data set, were not members at the time the survey was conducted. Switzerland joined the UN in 2002, Serbia in 2000.

government and to use an instrumental approach to deal with possible endogeneity problems.

Section 2 of the paper provides the theoretical framework. Section 3 introduces the data and measures. Section 4 then presents the empirical findings and Section 5 finishes with some concluding remarks.

## 2 Theoretical Framework

### 2.1 Political Trust

The starting point of our theoretical framework are the studies by Brewer et al. (2004, 2005) which stress that not only the international, but also the domestic political environment affects international trust or trust in an international organization. The social capital literature has stressed the important consequences of social and institutional trust for mass political judgments covering also world affairs (see, e.g., Brewer et al. 2004; Brewer and Steenbergen 2002). The current situation in a country may affect the level of trust in international organizations. Brewer et al. (2004) stress that citizens who are cynical about domestic politics should be cynical about international relations as well (p. 97) and therefore might be cynical as well about international institutions. Citizens who believe that their own government does not fulfill their expectations may reason that international organizations may even be less able to satisfy their preferences. Thus, the authors hypothesize that Americans who have high values of political trust are more likely to believe that the United States can generally trust other nations than those with low values. The results indicate that social and political trust have a strong impact on international trust. As a proxy for political trust, Brewer et al. (2004, 2005) use trust in the government. This approach is in line with previous studies (Miller 1974; Hetherington 1998) but neglects further possible dimensions. Thus, instead of focusing entirely on trust in the government, we are going to investigate further dimensions of political trust. On the one hand side, there is a variable that focuses on trust at the constitutional level (trust in the legal system), thereby focusing on how the relationship between the state and its citizens is established. On the other hand, we will investigate trust variables at the current politico-economic process level using not only trust in the government, but also trust in the parliament and the political parties. We also predict in our case trust externalities from the country to the international level and therefore develop the following first core hypothesis:

*Core hypothesis 1* A higher degree of trust in its own nation's institutions (legal system, government, political parties and parliament), increases ceteris paribus trust in the UN.

### 2.2 Social Trust

Moreover, in line with Brewer et al. (2004, 2005) we argue that individuals may derive their trust in international organizations from even more general forms of

trust. Citizens' trust in organizations may be based on their assumptions about other people. Individuals with a higher social trust might be less xenophobic (see Uslander 2002; Brewer et al. 2004). Several previous studies have suggested that beliefs about human nature affect foreign policy attitudes (see, e.g., Sniderman and Citrin 1971; Conover and Feldman 1984, and Bartels 1995). Foreign policy decisions and evaluations are complex. Brewer and Steenbergen (2002) argue that individuals will turn to their beliefs about human nature when they need to make foreign policy judgments: "Just as social circumstances force people to make judgments about the trustworthiness of others, the task of making foreign policy judgments should compel citizens to make judgments about the trustworthiness of international actors ... In lieu of specific knowledge, then, they may translate their general trust (or distrust) in the people around them into specific trust (or distrust) in international actors" (pp. 42–43). This interpretation is near to Simon's (1955) theory of satisficing. In decisive situations, where someone does not know much about the possibilities of action and their consequences, the concept of the "bounded rationality" gains importance. Following a specific rule helps economize on the cost of information. A person with a strong trust in others and therefore human nature may believe that the key players at the UN have good intentions and will not try to take advantage of their position. On the other hand, a person who is cynical about others and human nature in general may also distrust the leading figures of the UN believing that they act selfishly and do not pursue citizens' preferences (see also Brewer and Steenbergen 2002). Thus, we can develop our second core hypothesis:

*Core hypothesis 2* A higher level of generalized trust increases *ceteris paribus* trust in the UN.

### 2.3 Corruption

It may be interesting to investigate additional variables that approximate state's capacity. Not only political trust may influence trust in international organizations, but also countries' perceived institutional quality. As a proxy we will investigate the impact of (perceived) corruption. In line with hypothesis one, it is possible to argue that a higher perceived corruption may lead to a lower trust in international organizations. On the other hand, one can argue individuals may hope for alternative channels to resolve problems in dysfunctional states and regions. The argument may be valid for developing and especially transition countries. This may lead to a higher trust in the UN rather than a lower trust. Western societies are less dependent on the functioning of an international organization as its governance and institutional quality is higher. Moreover, developed countries offer many viable channels for citizens to take action and express their preferences. The democratic structure allows individuals to a certain extent to control and influence the government. The government has therefore a stronger incentive to take into account citizens' preferences. Moreover, one can argue that developed countries have had longer experiences with international organizations and therefore their citizens may have a better knowledge of possible failures of an organization such as the UN, as they have better access to international information. It may be interesting to differentiate

between developed and developing or transition countries when investigating corruption.<sup>3</sup> We therefore develop the following two hypotheses:

*Core hypothesis 3* A higher level of (perceived) corruption in respondent's country reduces *ceteris paribus* trust in the UN in developed countries.

*Core hypothesis 4* A higher level of (perceived) corruption in respondent's country increases *ceteris paribus* trust in the UN in developing and transition countries.

To test these hypotheses we run specifications for different regions. Moreover, the regional dummy variables in the pooled estimations will show whether there are also different regional trust levels.

## 2.4 Geographic Identification

We can also expect that geographic identification should affect international trust and more particularly trust in the UN. This is a relatively unexplored aspect in the literature.<sup>4</sup> A stronger identification with the world as a whole may induce higher preference to establish and preserve international organizations. On the other hand, individuals strongly attached to the local area might be more skeptical about the usefulness of an international organization. Thus, the following hypothesis can be developed:

*Core hypothesis 5* The more extensive the citizens' identification with the world as a whole, the higher *ceteris paribus* the trust in the UN.

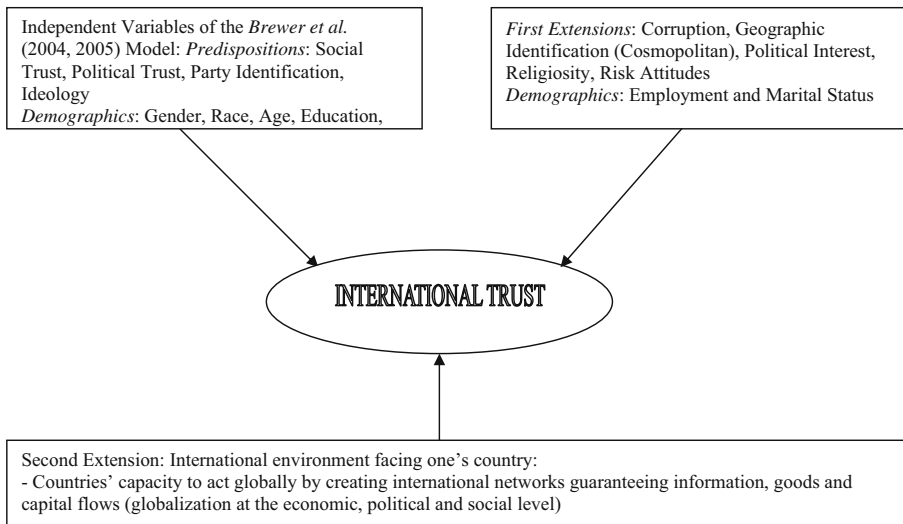
## 2.5 Globalization

The international environment that a country faces might be a key factor as well. Countries' capacity to act globally by creating international networks guaranteeing information, goods and capital flows increase the demand for international stability and the avoidance of a dangerous international environment. A safe environment guarantees that the international network is maintained. Such conditions may foster trust in international organizations as the UN. However, the level of trust may also depend on the extent to which the UN is in fact able to promote peace, security, and economic development. The literature on globalization has investigated its impact on growth, government outlays and taxes or consumption (for an overview see Dreher 2006), but has strongly neglected its impact on social capital or on international trust and trust in international organizations. To investigate this question we will work with an interesting data set provided by Dreher (2006) that differently from other studies provides an overall measure of globalization, covering several dimensions of

<sup>3</sup> Interestingly, Dreher and Schneider (2006) find the tendency that shadow economy and corruption are substitutes in high income countries while in low income countries these factors are complements.

<sup>4</sup> There is some evidence in the environmental economics literature that indicates that geographic identification affects environmental preferences (see Torgler and García-Valiñas 2007).

### A Model of International Trust



**Fig. 1** A Model of International Trust

globalization by using 23 variables. This allows to usefully investigate empirically the impact of globalization on international trust.<sup>5</sup> We will try the following core hypothesis:

*Core hypothesis 6* The more extensive countries' capacity to act globally, the higher *ceteris paribus* the trust in the UN.

To provide an overview of this paper's contribution, we present in Fig. 1 a model of international trust. We use international trust as the dependent factor taking into account that we define trust in the international organizations as a sub-category of international trust. On the top left hand side we find the suggested model of Brewer et al. (2004, 2005). Key factors in this model are social and political trust, party identification and ideology. On the right hand side we show how we first extend this previous model, including also factors such as corruption and geographic identification. Moreover, we also provide a model that takes into account that the international environment a country is facing may influence international trust. In particular, we extend the model investigating to which extent country's capacity to act globally affects international trust.

<sup>5</sup> Our specifications will have enough degrees of freedom at the country level to be able to consider an aggregated country variable in the regression.

### 3 Data and Empirical Model

#### 3.1 World Values Survey and Dependent Variable

The data used in the present study are taken from the World Values Survey, a worldwide investigation of socio-cultural and political change, based on representative national samples. It was first carried out in 1981–1983, and subsequently in 1990–1991, 1995–1996 and 1999–2001. Data from these surveys are made publicly available for use by researchers interested in how views change with time. The researchers who conduct and administer the World Values Survey (WVS) in their respective countries are required to follow the methodological requirements of the World Values Survey Association. Surveys are generally based on national representative samples of at least 1,000 individuals, ages 18 and over (although sometimes people under the age of 18 participate). The samples are selected using probability random methods and the questions in the national surveys generally do not deviate far from the original official questionnaire.<sup>6</sup> We will use a data set that covers 38 countries and focus on the third instead of the fourth wave, as in the latter not all independent variables relevant to our study have been collected (e.g., perceived corruption). The World Values Survey offers the great opportunity to investigate a broad set of possible determinants. The question on trust in the UN is phrased as follows:

*I am going to name a number of organizations. For each one, could you tell me how much confidence you have in them: is it a great deal of confidence, quite a lot of confidence, not very much confidence or none at all? The United Nations.*

Our dependent variable TRUST IN UN has the value 4 for a great deal of confidence and 1 for none at all.

We will use an ordered probit model to analyze the ranking information of the scaled dependent variable. A weighting variable has been applied to correct the samples and thus to get a reflection of the national distribution. Moreover, the original weight variable was multiplied by a constant for each country to get an equal number of weighted observations (around 1,500) for each survey. The World Values Survey provides the weighting variable. Countries with fewer than 750 observations (Montenegro, the Dominican Republic, Ghana, Pakistan, and Tambov) were excluded from the sample to reduce possible biases due to a lack of representativeness. Several other countries were excluded, as they don't provide information regarding the dependent and independent variables integrated in our estimations.<sup>7</sup> Finally, Sweden could not be included as one of the control variables (education) is coded differently. We proceed with a sample of 38 countries.<sup>8</sup> The estimations are

<sup>6</sup> A typical World Values Survey can be viewed at <http://www.worldvaluessurvey.org>.

<sup>7</sup> These countries are Poland, Japan, South Africa, Puerto Rico, China, Columbia.

<sup>8</sup> Western Europe Countries & USA & Australia (USA, Western Germany, Eastern Germany, Switzerland, Australia, Norway, Finland, Spain), CEE and FSU (Bulgaria, Belarus, Estonia, Georgia, Latvia, Lithuania, Moldova, Armenia, Russia, Slovenia, Ukraine, Azerbaijan, Serbia, Macedonia, Croatia, Bosnia-Herzegovina), Latin America (Mexico, Argentina, Brazil, Chile, Peru, Venezuela, Uruguay), Asia (South Korea, India, Taiwan, China, Philippines, Bangladesh), Africa (Nigeria).

also performed for various geographic sub-samples to compare the relevance of our independent variables in different environments.

### 3.2 Key Independent Variables

#### 3.2.1 Political Trust and Social Trust at the Country Level

As mentioned in the previous section we are going to investigate different dimensions of political trust. Brewer et al. (2004, 2005) proxied political trust focusing on an index that measures trust in the government.<sup>9</sup> The questions we are using in this study are:

*Could you tell me how much confidence you have in:*

The legal system  
Government in your capital  
Parliament  
Political parties

*Do you have a great deal of confidence, quite a lot of confidence, not very much confidence or no confidence at all? (4 = a great deal of confidence to 1 = no confidence at all).* We are going to use all single factors but will also use a POLITICAL TRUST INDEX (average of all factors).

To measure social trust, we will use a standard question that measures generalized trust (see, e.g., Uslaner 2002):

*Generally speaking, would you say that most people can be trusted or that you can't be too careful in your dealings with people? (1=most people can be trusted, 0=can't be too careful).*

#### 3.2.2 Corruption

To assess the level of (perceived) corruption from the WVS, we use the following question:

- How widespread do you think bribe taking and corruption is in this country?
- Almost no public officials are engaged in it (1)
- A few public officials are engaged in it (2)
- Most public officials are engaged in it (3)
- Almost all public officials are engaged in it (4)

The variable perceived corruption is in line with other indexes such as the Transparency International that also measures perceptions. However, perceptions are neither objective nor quantitative measures of the actual degree of corruption. It is an

<sup>9</sup> Questions: How much of the time can you trust the government in Washington to do what is right?" "Would you say the government is pretty much run by a few big interests looking out for themselves or that it is run for the benefit of all the people?" Do you think that quite a few of the people running the government are crooked, not very many are or do you think hardly any of them are crooked?" and "Do you think that people in the government waste a lot of the money we pay in taxes, waste some of it, or don't waste very much of it?"



indirect way of measuring corruption (Tanzi 2002). Analyzing the Transparency International Index Treisman (2000, pp. 410–411) finds though valid arguments why data based on perceptions should be taken seriously. Components of the used surveys and ratings are highly correlated, although they have been made with different methodologies, different inputs and in a different time period. Such a consistency allows to conclude that factors are almost free of biases such as a “temporal mood” or guesses. There is also a consistency in the Transparency International over time, although the construction of the index varies over time. Finally, the index is strongly correlated with other corruption indexes such as the ICRG, the BI or the Gallup International. Tanzi (2002) points out: “If corruption could be measured, it could probably be eliminated” (p. 38). A good feature to test whether the World Values Survey question about PERCEIVED CORRUPTION is a useful proxy is to check whether the variable is correlated with other well-known indexes on corruption. Thus, we compare our variable with the corruption indexes TI (Transparency International), International Country Risk Guide (ICRG) and Quality of Government (Control of Corruption) developed by Kaufmann et al. (2003). The World Values Survey Corruption ratings are highly correlated with the TI ( $r=-0.878$ ), the ICRG ( $r=-0.680$ ) and the Quality of Government rating ( $r=-0.827$ ).<sup>10</sup>

### 3.2.3 Geographic Identification

To measure individuals’ perceptions to which geographic groups they belong first of all (COSMOPOLITAN) we will use the following question:

*To which of these geographic groups would you say you belong first of all?  
Locality or town where you live (1), state or region of country where you live  
(2), country as a whole (3), continent (4), the world as a whole (5).*

### 3.2.4 Globalization

We are going to use data provided by Dreher (2006) that measure three main dimensions of globalization: economic, social and political globalization. The overall index of globalization covers not less than 23 variables. Interestingly, the data is available on a yearly basis for 125 countries over the period 1970–2003. A description of the sub-factors is presented in the Appendix and the methodology is explained in detail in Dreher (2006).<sup>11</sup> We will use data from the year 1995. As not all of our 38 countries are covered in the data set, we will include this variable sequentially in the specification.

<sup>10</sup> The sign is negative because for all three ratings used (TI, ICRG and Quality of Government), a higher score corresponds to a lower corruption.

<sup>11</sup> The data can be downloaded under [http://www.kof.ch/globalization/download/globalization\\_2006\\_long.xls](http://www.kof.ch/globalization/download/globalization_2006_long.xls).

### 3.3 Specification of the Test Equation

To test our core hypotheses in a cross-sectional model, we propose the following baseline equation:

$$\begin{aligned} TRUSTUN_{is} = & \alpha + \beta_1 CTRL_{is} + \beta_2 SOCIALTRUST_{is} + \beta_3 POLITTRUST_{is} \\ & + \beta_4 CORRUPT_{is} + \beta_5 COSMOPOL_{is} + \beta_6 GLOBAL_s + FE_s \\ & + \varepsilon_{is} \end{aligned} \quad (1)$$

where  $is$  indexes an individual  $i$  in country  $s$ ,  $TRUSTUN_{is}$  denotes individuals' trust in the UN,  $SOCIALTRUST_{is}$ ,  $POLITTRUST_{is}$ ,  $CORRUPT_{is}$ ,  $COSMOPOL_{is}$ , and  $GLOBAL_s$  are our key variables social trust, political trust, (perceived) corruption, geographic identification (cosmopolitan) and globalization. The regression also contains several control variables,  $CTRL_{is}$ , including factors such as education, interest in politics, ideology, economic conditions, marital and employment status, risk attitudes, church attendance, age and gender. Country fixed effects ( $FE_s$ ) and an error term ( $\varepsilon_{is}$ ) complete the model. In some specifications we are also going to include regional dummy variables for the CEE and FSU (Central and Eastern Europe and Former Soviet Union countries), LATIN AMERICA, ASIA and AFRICA,<sup>12</sup> leaving the industrialized economies of WESTERN EUROPE, USA, and AUSTRALIA in the reference group.

In order to fulfill the *ceteris paribus* conditions, we have to control for a number of other important factors, which will be discussed in turn. First of all, we consider several socio-demographic and economic variables. Table 5 in the [Appendix](#) provides a description of these variables. Previous studies have shown the importance of these factors. For example, Brewer et al. (2004) find a negative correlation between age and international trust. They stress that the experiences older Americans have made during their formative years foster a generalized distrust of other nations. Education has a positive and income a negative effect, neither of them being statistically significant. We will use individuals' self-classification into various economic classes as a proxy for income because the ten-point income scale in the WVS is based on national currencies and is therefore less apt for a cross-country comparison. Moreover, income is coded on a scale from 1 to 10 and these income intervals are not fully comparable across countries. In addition, it should also be noted that this variable has a high amount of missing values.

Alesina and La Ferrara (2002) find that trust in others increases with age but at a declining rate, and that women have a lower level of trust compared to men.<sup>13</sup> The authors also find that income and education are positively correlated with trusting others, stressing that professional success increases individuals' trust in others. Glaeser et al. (2000) find similar results, but stress that such findings have multiple interpretations. The positive effect of education on trust may occur because more educated people are associated with other more educated people who are trustworthier. On the other hand, education may raise social skills or increase the possibilities to

<sup>12</sup> Only one country represents Africa (Nigeria).

<sup>13</sup> They argue that groups that were historically discriminated have a lower level of trust.

reward and punish other individuals. However, it can be argued that not only formal education matters, but also informal education, such as, for example, political interest. Compared to other determinants, the aspect of political interest has been widely neglected in the social capital literature. Such a variable might be highly relevant when focusing on trust in the UN.<sup>14</sup> Well-informed citizens may be better aware of the UN efforts, which may support their trust in such an international organization. However, they are also in a better position to assess the efficiency of the UN which may have a positive or a negative impact on their trust level, depending on how the UN acts. We also control for marital and employment status. For example, married people may have a higher level of institutional trust, because they are more constrained by their social network and often strongly involved in the community (Tittle 1980).<sup>15</sup> They furthermore might be more concerned with international problems than singles as the “parent effect” makes them seek their children’s future welfare. In the results of Alesina and La Ferrara (2002) marital status was uninfluential. On the other hand, Glaeser et al. (2000) report that married persons are more trusting.

We also control for the level of risk aversion with a dummy variable. The aim of the UN is among other things to maintain international peace and security and to cooperate in solving international, social, cultural and humanitarian problems (see <http://www.un.org/aboutun/basicfacts/unorg.htm>). More risk averse individuals may have higher preferences for such aims, which may help to create a higher level of identification and trust. Moreover, controlling for risk attitudes allows to find better insights regarding the variables age, gender, or economic situation. It could be argued that results related to the socio-demographic and socio-economic factors may be driven by different risk attitude functions. Hartog et al. (2002), for example, found in an empirical survey analysis that an increase in income reduces risk aversion.

Moreover we control for religiosity. However, rather than asking about the degree of religiosity directly, we include religiosity proxied by frequency of church attendance,<sup>16</sup> which approximates how much time individuals devote to religion, an aspect that traditional research has so far neglected (Iannaccone 2002). Interestingly, Alesina and La Ferrara find that religious affiliation of the respondents did not affect trust. They conclude “that it may be the case that it is not the religious beliefs per se but the organized forms of religion in different parts of the world that may influence differently social behavior” (p. 220). The frequency of church attendance indicates that people devote time to religion. Both involve ties to others, and religious activities might support the norms of a larger community (see Tittle and Welch 1983). The church as an institution induces behavioral norms and moral constraints among their community. Because religion can be seen as a proxy for such

<sup>14</sup> We use the following question to measure political interest: How interested would you say you are in politics? (4=very interested, 1=not at all interested). The results remain robust when using alternative proxies such as importance of politics (Question: How important is politics in your life (4=very important, 1=not at all important)).

<sup>15</sup> However, it can be argued that a stronger involvement at the *local* level may lead to a stronger skepticism toward international organizations that are more centralized.

<sup>16</sup> Corresponding question: Apart from weddings, funerals, and christenings, about how often do you attend religious services these days? More than once a week, once a week, once a month, only on special holy days, once a year, less often, never or practically never. (7=more than once a week to 1=never or practically never).

Table 1 Trust in the UN

| Weighted ordered probit     | (1)       |         |        | (2)       |         |        | (3)       |         |        | (4)       |         |        |
|-----------------------------|-----------|---------|--------|-----------|---------|--------|-----------|---------|--------|-----------|---------|--------|
|                             | Coeff     | z-Stat. | Marg.  | Coeff     | z-Stat. | Marg.  | Coeff     | z-Stat. | Marg.  | Coeff     | z-Stat. | Marg.  |
| (a) Demographic factors     |           |         |        |           |         |        |           |         |        |           |         |        |
| Age 30–49                   | -0.071*** | -4.13   | -0.015 | -0.073*** | -4.15   | -0.016 | -0.058*** | -3.20   | -0.012 | -0.058*** | -3.19   | -0.012 |
| Age 50–64                   | -0.021    | -0.92   | -0.005 | -0.025    | -1.06   | -0.005 | -0.024    | -1.03   | -0.005 | -0.025    | -1.04   | -0.005 |
| Age 65+                     | -0.108*** | -3.07   | -0.022 | -0.110*** | -3.09   | -0.023 | -0.147*** | -4.10   | -0.027 | -0.146*** | -4.09   | -0.027 |
| Female                      | -0.017    | -1.25   | -0.004 | -0.020    | -1.45   | -0.004 | -0.015    | -1.07   | -0.003 | -0.015    | -1.04   | -0.003 |
| (b) Education               |           |         |        |           |         |        |           |         |        |           |         |        |
| Formal                      | 0.003     | 0.81    | 0.001  | 0.002     | 0.63    | 0.0005 | 0.014***  | 4.04    | 0.003  | 0.014***  | 3.81    | 0.003  |
| (c) Politics/informal educ. |           |         |        |           |         |        |           |         |        |           |         |        |
| Political interest          | 0.046***  | 6.09    | 0.010  | 0.046***  | 5.89    | 0.010  | -0.008    | -1.03   | -0.002 | -0.005    | -0.67   | -0.001 |
| (d) Marital status          |           |         |        |           |         |        |           |         |        |           |         |        |
| Married                     | -0.029*   | -1.66   | -0.006 | -0.030*   | -1.70   | -0.007 | -0.037**  | -2.02   | -0.007 | -0.038**  | -2.07   | -0.008 |
| Widowed                     | -0.031    | -0.95   | -0.007 | -0.026    | -0.81   | -0.006 | -0.037    | -1.10   | -0.007 | -0.040    | -1.20   | -0.008 |
| Divorced                    | -0.050    | -1.47   | -0.011 | -0.041    | -1.19   | -0.009 | -0.031    | -0.85   | -0.006 | -0.031    | -0.85   | -0.006 |
| Separated                   | -0.092*   | -1.91   | -0.019 | -0.091*   | -1.86   | -0.019 | -0.096*   | -1.90   | -0.018 | -0.097*   | -1.92   | -0.018 |
| (e) Economic variables      |           |         |        |           |         |        |           |         |        |           |         |        |
| Upper class                 | 0.050     | 0.95    | 0.011  | 0.041     | 0.76    | 0.009  | -0.003    | -0.06   | -0.001 | -0.005    | -0.09   | -0.001 |
| Upper middle class          | 0.137***  | 7.30    | 0.031  | 0.136***  | 7.15    | 0.031  | 0.085***  | 4.37    | 0.018  | 0.084***  | 4.28    | 0.017  |
| Lower middle class          | 0.048***  | 3.25    | 0.010  | 0.050***  | 3.38    | 0.011  | 0.022     | 1.45    | 0.004  | 0.021     | 1.39    | 0.004  |
| (f) Employment status       |           |         |        |           |         |        |           |         |        |           |         |        |
| Part time employed          | 0.050**   | 2.08    | 0.011  | 0.052**   | 2.15    | 0.012  | 0.045*    | 1.80    | 0.009  | 0.046*    | 1.83    | 0.009  |
| Selfemployed                | 0.025     | 1.06    | 0.006  | 0.029     | 1.22    | 0.006  | 0.039     | 1.57    | 0.008  | 0.038     | 1.56    | 0.008  |

|                                |           |        |        |           |        |        |          |       |         |          |       |         |
|--------------------------------|-----------|--------|--------|-----------|--------|--------|----------|-------|---------|----------|-------|---------|
| Unemployed                     | -0.017    | -0.71  | -0.004 | -0.016    | -0.64  | -0.003 | -0.010   | -0.41 | -0.002  | -0.010   | -0.41 | -0.002  |
| At home                        | 0.043*    | 1.80   | 0.010  | 0.048**   | 1.98   | 0.011  | 0.026    | 1.03  | 0.005   | 0.025    | 1.02  | 0.005   |
| Student                        | 0.072**   | 2.59   | 0.016  | 0.074***  | 2.62   | 0.017  | 0.082*** | 2.82  | 0.017   | 0.081*** | 2.79  | 0.017   |
| Retired                        | 0.060**   | 2.19   | 0.013  | 0.069**   | 2.48   | 0.016  | 0.049*   | 1.73  | 0.010   | 0.049*   | 1.73  | 0.010   |
| Other                          | 0.010     | 0.23   | 0.002  | 0.018     | 0.42   | 0.004  | -0.002   | -0.04 | -0.0003 | -0.001   | -0.02 | -0.0002 |
| (g) Risk attitudes             |           |        |        |           |        |        |          |       |         |          |       |         |
| Risk averse                    | 0.013     | 0.98   | 0.003  | 0.020     | 1.44   | 0.004  | 0.012    | 0.87  | 0.002   | 0.012    | 0.83  | 0.002   |
| (h) Religiosity                |           |        |        |           |        |        |          |       |         |          |       |         |
| Church attendance              | 0.018***  | 4.96   | 0.004  | 0.016***  | 4.39   | 0.004  | -0.001   | -0.17 | -0.0001 | -0.001   | -0.20 | -0.0002 |
| (i) Institutional quality      |           |        |        |           |        |        |          |       |         |          |       |         |
| Corruption                     | -0.115*** | -13.09 | -0.025 | -0.110*** | -12.34 | -0.024 | 0.002    | 0.18  | 0.0003  | 0.003    | 0.35  | 0.001   |
| (j) Social and political trust |           |        |        |           |        |        |          |       |         |          |       |         |
| Others                         |           |        |        |           | 6.09   | 0.020  | 0.024    | 1.58  | 0.005   | 0.022    | 1.45  | 0.004   |
| Political trust index          |           |        |        |           |        |        | 0.159*** | 49.85 | 0.032   |          |       |         |
| Legal system                   |           |        |        |           |        |        |          |       |         | 0.166*** | 16.80 | 0.033   |
| Government                     |           |        |        |           |        |        |          |       |         | 0.124*** | 10.73 | 0.025   |
| Political parties              |           |        |        |           |        |        |          |       |         | 0.115*** | 9.56  | 0.023   |
| Parliament                     |           |        |        |           |        |        |          |       |         | 0.228*** | 18.02 | 0.046   |
| (k) Geographic identification  |           |        |        |           |        |        |          |       |         |          |       |         |
| Cosmopolitan                   | 0.018***  | 3.67   | 0.004  | 0.018***  | 3.55   | 0.004  | 0.022*** | 4.18  | 0.004   | 0.022*** | 4.14  | 0.004   |
| Country fixed effects          | Yes       |        |        | Yes       |        |        | Yes      |       |         | Yes      |       |         |
| Pseudo R2                      | 0.046     |        |        | 0.046     |        |        | 0.090    |       |         | 0.091    |       |         |
| Number of observations         | 36,245    |        |        | 35,078    |        |        | 33,423   |       |         | 33,423   |       |         |
| Prob<chi2                      | 0.000     |        |        | 0.000     |        |        | 0.000    |       |         | 0.000    |       |         |

Robust standard errors. In the reference group are Age<30, Male, Single, Lowest/Working Class, Full Time Employed, Risk Takers. \*, \*\* and \*\*\* denote significance at the 10, 5 and 1% level.

characteristics as work ethic, tolerance, and trust (La Porta et al. 1999), it acts as a sanctioning system that legitimizes and reinforces social values. Religious organizations thus provide moral social constitutions and, to a certain extent, act as “supernatural police” that enforce accepted rules (Anderson and Tollison 1992). Thus, religion has a comparative advantage in producing or encouraging social goods in large cultures of intermediate complexity whose central government is too weak to enforce property rights (Hull and Bold 1994). The aims of the UN are similar to the ones churches promote (dealing with social, cultural and humanitarian problems etc.) and thus their influence may help to increase individuals’ trust in the UN. Moreover, it can be argued that church attendance captures similar to trust in the UN an underlying factor of vertical trust or belief in authority.

On the other hand, similar purposes may lead to a certain level of competition, which would reduce the level of trust in the UN. Finally, we also control for ideology (RIGHTIST).<sup>17</sup> Due to the high number of missing values we include this variable sequentially in the specification. The literature for the US has shown, for example, that Republicans and conservative political elites are more pessimistic regarding the nature of international relations, taking into account that citizens follow signals from political elites (Brewer et al. 2004).

## 4 Empirical Evidence

Table 1 presents the first empirical results. In the regressions we use country fixed effects to take into account unobservable country specific characteristics. Moreover, since the equation in an ordered probit model is nonlinear, only the signs of the coefficients can be directly interpreted and not their sizes. Calculating the marginal effects is therefore a method to find the quantitative effect of an independent variable. The marginal effect indicates the change in the share of individuals (or the probability of) belonging to the highest trust in the UN level when the independent variable increases by one unit. If the independent variable is a dummy variable, the marginal effect is evaluated with regard to the reference group. Furthermore, “I don’t know” answers and missing values were omitted from all estimations.

First we present an estimation including corruption, but neither generalized trust nor trust in the state (see specification 1). In a second approach we include generalized trust (2). The last two estimations include political trust, first as an index (3) and in a second step including all single factors (4). We include social and political trust *sequentially* in the estimations to meet any possible criticism of similarities with our dependent variables. The first two specifications show that a higher level of perceived corruption leads to a lower level of trust in the UN, which supports the argument of Brewer et al. (2004) that a lower level of government quality reduces trust at the international level. The marginal effects indicate that an increase in the perceived corruption scale by one unit reduces the probability of reporting the highest trust in the UN by around 2.5 percentage points. However, once we control for political trust, the coefficient is not statistically significant

<sup>17</sup> In political matters, people talk of “the left” and “the right.” How would you place your views on this scale, generally speaking? Scale from 1 to 10.

anymore. Looking at the estimations (2) to (4), we can conclude in line with Brewer et al. (2004, 2005) that social trust and political trust have a positive effect on trust at the international level. However, contrary to Brewer et al. (2004, 2005) we find that generalized trust affects our dependent variable to a lesser extent than political trust. The coefficient of generalized trust loses its significance after controlling for political trust. Table 1 shows that the impact of political trust is quite substantial. An increase in the index by one unit raises the share of individuals at the highest level of trust in the UN by 3.2 percentage points. The fourth estimation in Table 1 indicates that all subcomponents are statistically significant with high marginal effects between 2.3 and 4.6 percentage points. The strongest effects are observable for the variables trust in the parliament and trust in the legal system. These results indicate strong externalities. Political trust at the state level leads to a higher trust at the international level. Thus, we can conclude that hypothesis 1 cannot be rejected.

We also find a positive correlation between the variable cosmopolitan and trust in the UN. The coefficient is always statistically significant although the marginal effects are not comparable to the variable political trust. Nevertheless, the results indicate that hypothesis 5 cannot be rejected. The stronger citizens' identification with the world as a whole, the higher their trust in the UN. The question remains whether a higher trust in the UN also affects individuals' geographic identification. The multidimensional aspect of being cosmopolitan or not may lead to the conclusion that the reverse causation is less obvious.

The control variables show that all age groups from 30 to 65+ have a significantly lower probability of trusting the UN than the reference group. The strongest effect is observable for the age group 65+, followed by the group 30–49. Being in the highest age group rather than the youngest one reduces the probability of stating that the UN can be trusted a great deal by more than 2 percentage points. The group 50–64 is less skeptical (coefficient is never statistically significant). No gender differences have been found. On the other hand, we find that married and separated people have *ceteris paribus* a lower trust in the UN, while students, retired people and part time employed individuals have a higher trust in the UN than full time employed ones. Formal education shows a tendency for a positive impact on the level of trust. Informal education or in other words political interest is also positively correlated with trust in the UN. The first two estimations indicate that an increase in the level of political interest increases the probability of stating that the UN can be trusted a great deal by 1 percentage point. However, the coefficient loses its statistical significance after including political trust. Interestingly, we observe a non-linear effect of the economic situation group variable. The middle class shows the highest values of trust in the UN. Table 1 also shows that risk attitudes don't affect trust in the UN. Looking at the first two estimations we can conclude that church attendance is positively correlated with a higher trust in the UN. On the other hand, once we control for political trust, the coefficient switches its sign without losing its statistical significance and therefore giving stronger support, for example, to the competition argument. However, it should be noted that the marginal effects are not very high.

In Table 2 we extend the previous specification including also ideology (5). As can be seen, the number of observations strongly decreases, which justifies the sequential integration of this variable. Contrary to our expectations the coefficient of the results is statistically not significant and has a negative sign. We will therefore

**Table 2** Further determinants of trust in the UN

|                                | (5)       |         |        | (6)       |         |        | (7)       |         |        | (8)       |         |        |
|--------------------------------|-----------|---------|--------|-----------|---------|--------|-----------|---------|--------|-----------|---------|--------|
|                                | Coeff     | z-Stat. | Marg.  | Coeff     | z-Stat. | Marg.  | Coeff     | z-Stat. | Marg.  | Coeff     | z-Stat. | Marg.  |
| <b>Weighted ordered probit</b> |           |         |        |           |         |        |           |         |        |           |         |        |
| <b>(a) Demographic factors</b> |           |         |        |           |         |        |           |         |        |           |         |        |
| Age 30–49                      | −0.065*** | −3.33   | −0.013 | −0.071*** | −4.01   | −0.015 | −0.059*** | −2.95   | −0.012 | −0.059*   | −1.81   | −0.012 |
| Age 50–64                      | −0.021    | −0.82   | −0.004 | −0.039    | −1.67   | −0.008 | −0.012    | −0.44   | −0.002 | −0.012    | −0.31   | −0.002 |
| Age 65+                        | −0.149*** | −3.81   | −0.028 | −0.144*** | −4.09   | −0.029 | −0.135*** | −3.40   | −0.026 | −0.135*** | −2.94   | −0.026 |
| Female                         | −0.011    | −0.72   | −0.002 | 0.015     | 1.06    | 0.003  | 0.009     | 0.54    | 0.002  | 0.009     | 0.26    | 0.002  |
| <b>(b) Education</b>           |           |         |        |           |         |        |           |         |        |           |         |        |
| Formal                         | 0.012***  | 3.03    | 0.002  | 0.034***  | 10.79   | 0.007  | 0.038***  | 10.85   | 0.008  | 0.038**   | 2.35    | 0.008  |
| <b>(c) Politics</b>            |           |         |        |           |         |        |           |         |        |           |         |        |
| Political interest             | −0.015*   | −1.74   | −0.003 | 0.008     | 1.10    | 0.002  | −0.004    | −0.41   | −0.001 | −0.004    | −0.20   | −0.001 |
| <b>Ideology (Rightist)</b>     |           |         |        |           |         |        |           |         |        |           |         |        |
| 0.003                          | 0.84      | 0.001   |        |           |         |        |           |         |        |           |         |        |
| <b>(d) Marital status</b>      |           |         |        |           |         |        |           |         |        |           |         |        |
| Married                        | −0.036*   | −1.87   | −0.007 | −0.034*   | −1.92   | −0.007 | −0.071*** | −3.63   | −0.014 | −0.071*** | −3.05   | −0.014 |
| Widowed                        | −0.042    | −1.16   | −0.008 | −0.039    | −1.22   | −0.008 | −0.099*** | −2.72   | −0.019 | −0.099*** | −2.62   | −0.019 |
| Divorced                       | −0.021    | −0.55   | −0.004 | −0.009    | −0.27   | −0.002 | −0.035    | −0.88   | −0.007 | −0.035    | −0.77   | −0.007 |
| Separated                      | −0.100*   | −1.85   | −0.019 | −0.073    | −1.47   | −0.015 | −0.126**  | −2.36   | −0.024 | −0.126**  | −2.20   | −0.024 |
| <b>(e) Economic variables</b>  |           |         |        |           |         |        |           |         |        |           |         |        |
| Upper class                    | 0.019     | 0.32    | 0.004  | −0.201*** | −3.75   | −0.038 | −0.114*   | −1.84   | −0.022 | −0.114    | −1.54   | −0.022 |
| Upper middle class             | 0.088***  | 4.23    | 0.019  | 0.020     | 1.07    | 0.004  | 0.021     | 1.03    | 0.004  | 0.021     | 0.53    | 0.004  |
| Lower middle class             | 0.020     | 1.21    | 0.004  | 0.027*    | 1.80    | 0.006  | 0.024     | 1.40    | 0.005  | 0.024     | 0.89    | 0.005  |
| <b>(f) Employment status</b>   |           |         |        |           |         |        |           |         |        |           |         |        |
| Part time employed             | 0.047*    | 1.75    | 0.010  | 0.021     | 0.87    | 0.005  | 0.048*    | 1.71    | 0.010  | 0.048     | 1.30    | 0.010  |
| Self employed                  | 0.032     | 1.23    | 0.007  | 0.018     | 0.76    | 0.004  | 0.009     | 0.32    | 0.002  | 0.009     | 0.21    | 0.002  |
| Unemployed                     | −0.006    | −0.20   | −0.001 | 0.001     | 0.05    | 0.0002 | −0.003    | −0.10   | −0.001 | −0.003    | −0.09   | −0.001 |
| At home                        | 0.026     | 0.94    | 0.005  | −0.005    | −0.21   | −0.001 | 0.012     | 0.45    | 0.003  | 0.012     | 0.35    | 0.003  |
| Student                        | 0.085***  | 2.71    | 0.018  | 0.019     | 0.66    | 0.004  | 0.031     | 0.97    | 0.006  | 0.031     | 0.74    | 0.006  |
| Retired                        | 0.066**   | 2.12    | 0.014  | 0.081***  | 2.90    | 0.018  | 0.047     | 1.48    | 0.010  | 0.047     | 1.35    | 0.010  |



|                                |          |       |       |          |       |        |           |       |                 |          |       |           |
|--------------------------------|----------|-------|-------|----------|-------|--------|-----------|-------|-----------------|----------|-------|-----------|
| Other                          | 0.011    | 0.22  | 0.002 | -0.041   | -0.94 | -0.008 | -0.130**  | -2.62 | -0.024          | -0.130*  | -1.73 | -0.024    |
| (g) Risk attitudes             |          |       |       |          |       |        |           |       |                 |          |       |           |
| Risk averse                    | 0.013    | 0.89  | 0.003 | 0.004    | 0.33  | 0.001  | -0.003    | -0.22 | -0.001          | -0.003   | -0.18 | -0.001    |
| (h) Religiosity                |          |       |       |          |       |        |           |       |                 |          |       |           |
| Church attendance              | -0.0002  | -0.04 | 0.000 | -0.007*  | -1.93 | -0.001 | -0.015*** | -3.80 | -0.003          | -0.015   | -1.39 | -0.003    |
| (i) Institutional quality      |          |       |       |          |       |        |           |       |                 |          |       |           |
| Corruption                     | 0.014    | 1.40  | 0.003 | 0.025*** | 2.89  | 0.005  | 0.016*    | 1.65  | 0.003           | 0.016    | 0.88  | 0.003     |
| (j) Social and political trust |          |       |       |          |       |        |           |       |                 |          |       |           |
| Others                         | 0.025    | 1.50  | 0.005 | 0.024    | 1.63  | 0.005  | 0.003     | 0.21  | 0.001           | 0.003    | 0.10  | 0.001     |
| Political trust index          |          |       |       |          |       |        |           |       |                 |          |       |           |
| Legal system                   | 0.160*** | 14.99 | 0.033 | 0.162*** | 17.02 | 0.034  | 0.159***  | 14.75 | 0.032           | 0.159*** | 10.05 | 0.032     |
| Government                     | 0.130*** | 10.47 | 0.027 | 0.133*** | 12.00 | 0.028  | 0.158***  | 12.33 | 0.032           | 0.158*** | 5.79  | 0.032     |
| Political parties              | 0.108*** | 8.34  | 0.022 | 0.078*** | 6.68  | 0.017  | 0.100***  | 7.27  | 0.020           | 0.100*** | 4.49  | 0.020     |
| Parliament                     | 0.229*** | 16.84 | 0.047 | 0.199*** | 16.18 | 0.042  | 0.225***  | 15.77 | 0.045           | 0.225*** | 9.50  | 0.045     |
| (k) Geographic identification  |          |       |       |          |       |        |           |       |                 |          |       |           |
| Cosmopolitan                   | 0.019*** | 3.36  | 0.004 | 0.032*** | 6.35  | 0.007  | 0.021***  | 3.77  | 0.004           | 0.021*   | 1.76  | 0.004     |
| (l) Globalization              |          |       |       |          |       |        |           |       |                 |          |       |           |
| Index globalization            |          |       |       |          |       |        |           |       |                 |          |       |           |
| (m) Regions                    |          |       |       |          |       |        |           |       |                 |          |       |           |
| CEE and FSU                    |          |       |       | 0.155*** | 9.35  | 0.034  | 0.343***  | 12.40 | 0.077           | 0.343*** | 3.07  | 0.077     |
| Latin America                  |          |       |       | 0.205*** | 9.69  | 0.047  | 0.352***  | 12.60 | 0.078           | 0.352*** | 2.93  | 0.078     |
| Asia                           |          |       |       | 0.401*** | 18.27 | 0.100  | 0.629***  | 18.99 | 0.161           | 0.629*** | 3.23  | 0.161     |
| Africa                         |          |       |       | 0.507*** | 7.88  | 0.138  | 0.766***  | 10.56 | 0.220           | 0.766*** | 5.11  | 0.220     |
| Country fixed effects          | Yes      |       |       | No       |       |        | No        |       | Clustering over |          |       | Countries |
| Pseudo R2                      | 0.091    |       |       | 0.058    |       |        | 0.070     |       |                 | 0.070    |       |           |
| Number of observations         | 28,722   |       |       | 33,423   |       |        | 26,660    |       |                 | 26,660   |       |           |
| Prob>chi2                      | 0.000    |       |       | 0.000    |       |        | 0.000     |       |                 | 0.000    |       |           |

Robust standard errors. In the reference group are Age<30, Male, Single, Lowest/working class, Full time employed, Risk takers, Western Europe/USA/Australia. \*, \*\*, and \*\*\* denote significance at the 10, 5 and 1% level.

proceed without controlling for ideology in the next specifications. In the estimates (6) to (8) we investigate regional differences. In line with our prediction we observe that developed countries have the lowest level of trust in the UN; Western societies appear to be more critical of the UN. However, these results should be interpreted with due caution as the number of countries in each region is limited. In specification (7) and (8) we include the index of globalization. As not all 38 countries are covered by the index of globalization, the number of observations also decreases. The coefficient is statistically significant with a positive sign. The marginal effects show that an index increase by one unit raises the probability of reporting the highest trust in the UN level by 2.3 percentage points. Globalization matters quite significantly. It can be criticized that including an aggregated country variable such as globalization produces downward biased standard errors (see, e.g., the discussion in Frey and Stutzer 2000). Thus, we present standard errors adjusted for clustering on countries in specification (8). This allows to take into account heteroscedasticity. Clustering generally leads to a decrease in the *z*-values, but has no impact on the marginal effects. Table 2 shows that the coefficient is still statistically significant. Previously obtained results regarding our key variables remain robust. Thus, we can conclude that hypothesis 6 cannot be rejected.

In Table 3 we report the effect of the independent variables in the four regions.<sup>18</sup> It can be argued that the observed effects in the previous estimations might be driven by one of the regions. It is also possible that some variables act differently in the different regions. For example, it can be argued that social trust might have *ceteris paribus* a stronger positive effect on trust in the UN in developed countries where one could expect that citizens perceive UN diplomats to be more “of their own kind.” On the other hand, citizens of developing countries may feel in general more alien to such diplomats. Moreover, we test hypotheses 3 and 4 with this approach and find, according to our prediction, a negative correlation between corruption and trust in the UN for developed countries and a positive one between corruption and trust in the UN in developing and transition countries. The strongest effect can be observed for CEE and FSU countries. The transformation of the socialist economies was one of the main reasons for the surging interest in corruption since institutional weaknesses and corruption surfaced as major obstacles to market reforms (Abed and Gupta 2002). Levin and Satarov (2000), e.g., analyze corruption and institutions in Russia. They criticize that corruption is an integral part of Russia’s economy. Corruption has the negative consequence that citizens reduce their trust in the authority. Levin and Satarov state that the degree of corruption exceeds the total expenditures on science, education, health care, culture, and art. In some industrial branches criminal groups spend up to 50% of their revenues to bribe officials (p. 115). In sum, the results in Table 3 indicate that hypotheses 3 and 4 cannot be rejected. Looking at the other key factors we also find that political trust has a positive impact on one dependent variable. The coefficients are highly statistically significant in all four regions. These results are in line with hypothesis 1 as well. On the other hand, social trust has a positive impact in Western societies and in CEE and FSU countries, but a negative one in Latin America and Asia. Thus, social trust does not have a consistent positive impact at the regional level, providing therefore only partial support for hypothesis 2.

<sup>18</sup> Africa has not been considered independently, as Nigeria was the only African country in the data set.

However, the strong differences between developed and developing countries may indicate that UN diplomats are less seen as people of their “own kind” in developing countries. Table 3 also shows a positive correlation between the variable cosmopolitan and trust in the UN. Interestingly, the strongest effect can be observed in CEE/FSU and Asian countries. We can also observe regional differences for other variables. For example, it is interesting to note that only in CEE/FSU the coefficient of upper class is statistically significant with a negative and high marginal effect. People who became rich might have been able to secure or establish their property rights after the rapid collapse of institutional structures that produced a vacuum in the country, followed by worsening income inequality and poverty rates. Their ability to succeed in such a system reduces their trust in international organizations which could change or affect their current situation. Another interesting finding is that risk aversion is relevant in Asian countries only, showing a positive correlation with trust in the UN. In sum, regional difference of the independent variables supports the relevance of investigating the regions independently.

Brewer et al. (2004, 2005) stress in their model that the causality runs from social and political trust to international trust. However, it can be criticized that social and political trust are endogenous. We conducted several 2SLS estimations providing detailed diagnostic tests to check the robustness of the results. The results are presented in Table 4. In a first step we include only social trust in specification (13). The coefficient is statistically significant with a positive sign. In a next step we include the political trust and globalization index. Here the results are also consistent with the previous ones. Social trust is not statistically significant anymore. On the other hand, political trust and globalization have a strong impact on our dependent variable. In specification (14) we test the importance of all three sub-factors for globalization, namely political, economic and social globalization. Dreher (2006) stresses in his growth paper that it is not obvious that all dimensions of globalization affect economic performance in the same direction. When including all three factors in the specification he finds support that economic globalization has the strongest impact on the GDP per capita growth rate. Interestingly, we find similar results when investigating trust in the UN. Economic globalization has the strongest impact on trust in the UN, showing a positive sign. Political globalization is also positively correlated with trust in the UN at the 5% level. On the other hand, we find a negative correlation between social globalization and trust in the UN (on the border of being statistically significant). This shows that different dimensions of globalization affect trust in the UN in different ways. Table 4 also indicates that individuals’ geographic identification has a strong and robust impact on their trust in the UN. Finally, we also find the tendency that corruption is positively correlated with trust in the UN, a result that we observed for developing and transition countries.

Table 4 reports that we use two variables, namely one variable that measures social preferences and another that measures individuals’ satisfaction with life as instruments for social trust.<sup>19</sup> Political trust is instrumented through an index that

<sup>19</sup> Questions: To build good human relationships, it is most important to try to understand others’ preferences (value 1); To build good relationships, it is most important to express one’s own preferences clearly. All things considered, how satisfied are you with your life as a whole these days? (1=dissatisfied, 10=satisfied).

Table 3 Regional differences

| Weighted ordered probit     | (9)                            |         |        | (10)                  |         |        | (11)                     |         |        | (12)            |         |        |
|-----------------------------|--------------------------------|---------|--------|-----------------------|---------|--------|--------------------------|---------|--------|-----------------|---------|--------|
|                             | Coeff                          | z-Stat. | Marg.  | Coeff                 | z-Stat. | Marg.  | Coeff                    | z-Stat. | Marg.  | Coeff           | z-Stat. | Marg.  |
|                             | Western Europe, USA, Australia |         |        | CEE and FSU countries |         |        | Latin American countries |         |        | Asian countries |         |        |
| (a) Demographic factors     |                                |         |        |                       |         |        |                          |         |        |                 |         |        |
| Age 30–49                   | -0.121***                      | -3.31   | -0.014 | -0.137***             | -4.80   | -0.029 | -0.012                   | -0.31   | -0.003 | 0.062           | 1.40    | 0.018  |
| Age 50–64                   | -0.093**                       | -2.00   | -0.011 | -0.114***             | -3.07   | -0.024 | 0.040                    | 0.76    | 0.010  | 0.076           | 1.17    | 0.023  |
| Age 65+                     | -0.172**                       | -2.59   | -0.019 | -0.216***             | -3.80   | -0.042 | -0.061                   | -0.74   | -0.015 | -0.090          | -0.73   | -0.026 |
| Female                      | 0.107***                       | 3.87    | 0.013  | -0.012                | -0.57   | -0.003 | -0.088***                | -2.71   | -0.022 | 0.060           | 1.46    | 0.018  |
| (b) Education               |                                |         |        |                       |         |        |                          |         |        |                 |         |        |
| Formal                      | -0.007                         | -1.14   | -0.001 | 0.058***              | 11.03   | 0.013  | 0.054***                 | 7.09    | 0.014  | -0.012          | -1.26   | -0.004 |
| (c) Politics/informal educ. |                                |         |        |                       |         |        |                          |         |        |                 |         |        |
| Political interest          | -0.039***                      | -2.64   | -0.005 | 0.031**               | 2.42    | 0.007  | 0.008                    | 0.49    | 0.002  | 0.051**         | 2.34    | 0.015  |
| (d) Marital status          |                                |         |        |                       |         |        |                          |         |        |                 |         |        |
| Married                     | -0.093***                      | -2.73   | -0.011 | 0.078***              | 2.65    | 0.017  | -0.077**                 | -2.07   | -0.019 | -0.143***       | -2.94   | -0.043 |
| Widowed                     | -0.139**                       | -2.00   | -0.015 | 0.113**               | 2.21    | 0.026  | -0.170**                 | -2.08   | -0.039 | 0.057           | 0.73    | 0.017  |
| Divorced                    | 0.0002                         | 0.00    | 0.000  | 0.099*                | 1.84    | 0.023  | -0.150*                  | -1.75   | -0.035 | -0.392*         | -1.70   | -0.097 |
| Separated                   | 0.065                          | 0.73    | 0.008  | 0.070                 | 0.82    | 0.016  | -0.171**                 | -2.15   | -0.040 | -0.105          | -0.48   | -0.030 |
| (e) Economic variables      |                                |         |        |                       |         |        |                          |         |        |                 |         |        |
| Upper class                 | 0.027                          | 0.23    | 0.003  | -0.414***             | -4.50   | -0.071 | -0.118                   | -0.82   | -0.028 | -0.076          | -0.67   | -0.022 |
| Upper middle class          | 0.026                          | 0.76    | 0.003  | -0.060*               | -1.80   | -0.013 | 0.100**                  | 2.14    | 0.026  | 0.105**         | 2.02    | 0.031  |
| Lower middle class          | -0.054*                        | -1.80   | -0.006 | 0.007                 | 0.30    | 0.001  | 0.111***                 | 3.41    | 0.028  | 0.027           | 0.59    | 0.008  |
| (f) Employment status       |                                |         |        |                       |         |        |                          |         |        |                 |         |        |
| Part time employed          | 0.115**                        | 2.59    | 0.015  | -0.024                | -0.61   | -0.005 | -0.103*                  | -1.85   | -0.025 | -0.046          | -0.64   | -0.013 |
| Selfemployed                | -0.090*                        | -1.70   | -0.010 | -0.005                | -0.10   | -0.001 | -0.044                   | -0.96   | -0.011 | 0.183***        | 3.51    | 0.056  |

|                                |           |       |        |          |       |       |           |       |        |           |       |        |
|--------------------------------|-----------|-------|--------|----------|-------|-------|-----------|-------|--------|-----------|-------|--------|
| Retired                        | 0.058     | 1.09  | 0.007  | 0.127*** | 3.02  | 0.029 | 0.020     | 0.29  | 0.005  | 0.071     | 0.52  | 0.021  |
| Other                          | -0.114    | -0.95 | -0.013 | 0.127**  | 2.23  | 0.029 | -0.228**  | -2.29 | -0.051 | -0.177*   | -1.81 | -0.048 |
| (g) Risk attitudes             |           |       |        |          |       |       |           |       |        |           |       |        |
| Risk averse                    | -0.010    | -0.37 | -0.001 | 0.015    | 0.64  | 0.003 | -0.030    | -0.96 | -0.007 | 0.093***  | 2.60  | 0.027  |
| (h) Religiosity                |           |       |        |          |       |       |           |       |        |           |       |        |
| Church attendance              | -0.027*** | -4.33 | -0.003 | 0.010*   | 1.65  | 0.002 | 0.004     | 0.61  | 0.001  | -0.015    | -1.60 | -0.005 |
| (i) Institutional quality      |           |       |        |          |       |       |           |       |        |           |       |        |
| Corruption                     | -0.043**  | -2.47 | -0.005 | 0.064*** | 4.36  | 0.014 | 0.031*    | 1.73  | 0.008  | 0.007     | 0.30  | 0.002  |
| (j) Social and political trust |           |       |        |          |       |       |           |       |        |           |       |        |
| Others                         | 0.117***  | 4.45  | 0.014  | 0.065*** | 2.77  | 0.014 | -0.165*** | -4.17 | -0.039 | -0.173*** | -3.82 | -0.049 |
| Political trust index          |           |       |        |          |       |       |           |       |        |           |       |        |
| Legal system                   | 0.180***  | 9.46  | 0.022  | 0.171*** | 11.19 | 0.037 | 0.136***  | 6.98  | 0.034  | 0.143***  | 5.32  | 0.042  |
| Government                     | 0.091***  | 3.92  | 0.011  | 0.109*** | 6.27  | 0.024 | 0.211***  | 9.94  | 0.053  | 0.168***  | 5.05  | 0.049  |
| Political parties              | 0.197***  | 7.75  | 0.024  | 0.064*** | 3.68  | 0.014 | 0.055**   | 2.22  | 0.014  | 0.055     | 1.64  | 0.016  |
| Parliament                     | 0.262***  | 10.09 | 0.032  | 0.146*** | 7.74  | 0.032 | 0.248***  | 10.05 | 0.062  | 0.170***  | 5.05  | 0.050  |
| (k) Geographic identification  |           |       |        |          |       |       |           |       |        |           |       |        |
| Cosmopolitan                   | 0.017     | 1.63  | 0.002  | 0.064*** | 8.39  | 0.014 | 0.013     | 1.14  | 0.003  | 0.045***  | 2.96  | 0.013  |
| Pseudo R2                      | 0.070     |       |        | 0.043    |       |       | 0.073     |       |        | 0.049     |       |        |
| Number of observations         | 8842      |       |        | 13031    |       |       | 6053      |       |        | 4118      |       |        |
| Prob> chi2                     | 0.000     |       |        | 0.000    |       |       | 0.000     |       |        | 0.000     |       |        |

Robust standard errors. In the reference group are Age<30, Male, Single, Lowest/working class, Full time employed, Risk takers, Western Europe/USA/Australia. \*, \*\*, and \*\*\* denote significance at the 10, 5 and 1% level.

measures the justifiability of tax evasion and claiming government benefits without being entitled to.<sup>20</sup> We report the first-stage regression results of the instrumental variables and the *F*-tests of the exclusion of the instruments. Overall, the used instruments are very effective in explaining social and political trust. The instruments for social and political trust are always statistically significant at the 1% level, so are the *F*-tests for the instrument exclusion set in the first-stage regressions. We also report the Anderson canonical correlations LR test for the relevance of excluded instruments. A rejection of the null hypothesis indicates that the model is identified and that the instruments are relevant (see Hall et al. 1996). We also report the Anderson–Rubin test that the endogenous variables are jointly statistically significant. The test has the advantage of being robust to the presence of weak instruments. Table 4 reports that in all cases the Anderson canonical correlations LR test shows rejection of the null hypothesis, which indicates that the models are identified and that the instruments are relevant. Similarly, the Anderson–Rubin test is also statistically significant. We also present the Hansen J test for over-identification to examine the validity of the exclusion restrictions. In all the cases, this test fails to reject the null hypothesis that our instruments are valid, which supports their validity.

## 5 Concluding Remarks

In the last couple of years, the number of social capital studies has been growing. However, Brewer et al. (2004) criticize the lack of empirical studies that have analyzed international trust and urge that social and political trust are not the only forms of trust future research should study. Starting from this argument this paper investigates the determinants of trust in international organizations with a special focus on the United Nations. We extend the previous approach in several ways: (1) First we extend the previous empirical models including factors such as globalization, institutional quality (corruption) and geographic identity, (2) we have worked with a broader data set that covers not less than 38 countries with a cross-section of individuals from the World Values Survey wave III (1995–1997) rather than just the US, (3) contrary to previous studies we also apply an instrumental approach to discussing endogeneity problems, and (4) we have investigated different dimensions of political trust. Previously, political trust has been proxied as trust in the government. In our case, we have also investigated trust in the legal system, in the parliament and the political parties. This allows to take into account the multidimensional current politico-economic process and also the trust at the constitutional level, focusing therefore additionally on how the relationship between the state and its citizens is established. The results provide strong support for the importance of political trust. The index and all the four factors have a strong and robust impact on our dependent variable. These results indicate strong externalities.

<sup>20</sup> Question: Please tell me for each of the following statements whether you think it can always be justified, never be justified, or something in between:... Cheating on taxes if you have the chance. Claiming government benefits to which you are not entitled ( 10="never justified," 1=always). Index: sum of both questions, scale from 1 to 20.

**Table 4** 2SLS estimations

| 2SLS                                   | (13)      |                    | (14)      |                    | (15)      |                    |
|--|-----------|--------------------|-----------|--------------------|-----------|--------------------|
|  | Coeff.    | <i>t</i> -statist. | Coeff.    | <i>t</i> -statist. | Coeff.    | <i>t</i> -statist. |
| (a) Demographic factors                |           |                    |           |                    |           |                    |
| Age 30–49                              | −0.108*** | −6.11              | −0.061*** | −3.12              | −0.060*** | −3.09              |
| Age 50–64                              | −0.089*** | −3.64              | −0.015    | −0.61              | −0.018    | −0.73              |
| Age 65+                                | −0.146*** | −4.12              | −0.105*** | −3.13              | −0.112*** | −3.32              |
| Female                                 | −0.021    | −1.50              | −0.017    | −1.22              | −0.019    | −1.38              |
| (b) Education                          |           |                    |           |                    |           |                    |
| Formal                                 | 0.014***  | 4.05               | 0.041***  | 7.31               | 0.043***  | 7.55               |
| (c) Politics                           |           |                    |           |                    |           |                    |
| Political interest                     | 0.013     | 1.41               | −0.044*** | −2.81              | −0.044*** | −2.79              |
| (d) Marital status                     |           |                    |           |                    |           |                    |
| Married                                | 0.010     | 0.57               | −0.049*** | −2.83              | −0.047*** | −2.69              |
| Widowed                                | 0.024     | 0.76               | −0.077**  | −2.36              | −0.073**  | −2.18              |
| Divorced                               | −0.032    | −0.92              | −0.018    | −0.56              | −0.016    | −0.48              |
| Separated                              | −0.013    | −0.27              | −0.081*   | −1.87              | −0.080*   | −1.83              |
| (e) Economic variables                 |           |                    |           |                    |           |                    |
| Upper class                            | −0.145*** | −2.76              | −0.118**  | −2.18              | −0.112**  | −2.06              |
| Upper middle class                     | 0.013     | 0.63               | −0.033    | −1.43              | −0.029    | −1.25              |
| Lower middle class                     | 0.035**   | 2.40               | −0.004    | −0.28              | −0.006    | −0.38              |
| (f) Employment status                  |           |                    |           |                    |           |                    |
| Part time employed                     | −0.036    | −1.35              | −0.002    | −0.09              | 0.000     | −0.01              |
| Selfemployed                           | 0.001     | 0.05               | 0.000     | −0.01              | −0.001    | −0.06              |
| Unemployed                             | 0.038     | 1.56               | 0.010     | 0.39               | 0.004     | 0.17               |
| At home                                | 0.028     | 1.14               | −0.028    | −1.09              | −0.024    | −0.96              |
| Student                                | 0.015     | 0.53               | 0.004     | 0.13               | 0.002     | 0.07               |
| Retired                                | 0.121***  | 4.23               | 0.014     | 0.45               | 0.012     | 0.40               |
| Other                                  | −0.005    | −0.12              | −0.060    | −1.47              | −0.057    | −1.41              |
| (g) Risk attitudes                     |           |                    |           |                    |           |                    |
| Risk averse                            | 0.039**   | 2.42               | −0.003    | −0.17              | −0.007    | −0.40              |
| (h) Religiosity                        |           |                    |           |                    |           |                    |
| Church attendance                      | 0.016***  | 4.69               | −0.007    | −1.36              | −0.006    | −1.21              |
| (i) Institutional quality              |           |                    |           |                    |           |                    |
| Corruption                             | −0.007    | −0.44              | 0.068***  | 2.66               | 0.073***  | 2.85               |
| (j) Social and political trust         |           |                    |           |                    |           |                    |
| Others                                 | 1.219***  | 5.91               | 0.204     | 0.80               | 0.130     | 0.50               |
| Political trust index                  |           |                    | 0.186***  | 4.96               | 0.195***  | 5.21               |
| (k) Geographic identification          |           |                    |           |                    |           |                    |
| Cosmopolitan                           | 0.042***  | 7.89               | 0.025***  | 4.78               | 0.026***  | 5.04               |
| (l) Globalization                      |           |                    |           |                    |           |                    |
| Index globalization                    |           |                    | 0.034**   | 2.19               |           |                    |
| Political globalization                |           |                    |           |                    | 0.023**   | 2.48               |
| Social globalization                   |           |                    |           |                    | −0.018*   | −1.67              |
| Economic globalization                 |           |                    |           |                    | 0.072***  | 4.45               |
| (m) Regions                            |           |                    |           |                    |           |                    |
| CEE and FSU                            | 0.267***  | 10.00              | 0.130***  | 2.79               | 0.129***  | 2.81               |
| Latin America                          | 0.329***  | 7.97               | 0.165***  | 2.85               | 0.137**   | 2.16               |
| Asia                                   | 0.626***  | 14.05              | 0.087     | 0.66               | 0.122     | 0.89               |
| Africa                                 | 0.572***  | 9.51               | 0.358***  | 4.23               | 0.451***  | 4.89               |
| First stage regressions:               |           |                    |           |                    |           |                    |
| Trusting others                        |           |                    |           |                    |           |                    |
| Social preferences                     | 0.051**** | 9.96               | 0.049***  | 7.74               | 0.046***  | 7.30               |
| Satisfaction                           | 0.008**** | 7.61               | 0.007***  | 5.29               | 0.007***  | 5.80               |
| <i>F</i> -test of excluded instruments | 79.76**** |                    | 31.17***  |                    | 30.78***  |                    |

**Table 4** (Continued)

| 2SLS   | (13)       |                    | (14)      |                    | (15)      |                    |
|--|------------|--------------------|-----------|--------------------|-----------|--------------------|
|  | Coeff.     | <i>t</i> -statist. | Coeff.    | <i>t</i> -statist. | Coeff.    | <i>t</i> -statist. |
| Political trust index                        |            |                    |           |                    |           |                    |
| Tax/gov. benefit morale                      |            |                    | 0.033***  | 6.80               | 0.033***  | 6.80               |
| <i>F</i> -test of excluded instruments       |            |                    | 37.36***  |                    | 38.33***  |                    |
| Anderson canon. Corr. Likelihood ratio stat. | 171.145*** |                    | 63.741*** |                    | 61.036*** |                    |
| Anderson–Rubin test                          | 21.68***   |                    | 11.92***  |                    | 12.590*** |                    |
| Hansen <i>J</i> statistic                    | 0.349      |                    | 0.035     |                    | 0.026     |                    |
| Number of observations                       | 31,435     |                    | 21,988    |                    | 21,988    |                    |
| Prob> <i>F</i>                               | 0.000      |                    | 0.000     |                    | 0.000     |                    |

Robust standard errors. In the reference group are GE<30, Male, Single, Lowest/working class, Full time employed, Risk takers, Western Europe/USA/Australia. \*, \*\* and \*\*\* denote significance at the 10, 5 and 1% level. CEE/FSU Central Eastern Europe and Former Soviet Union

People who are cynical about domestic politics are also more cynical about international institutions. Citizens who believe that their own government does not fulfill their expectations may reason that international bodies may even be less able to satisfy their preferences. The results remain robust after conducting several 2SLS estimations. We also observe the tendency that social trust matters. However, once we control for political trust, the significant impact of social trust disappears. The results also show that a higher level of (perceived) corruption reduces trust in the UN in developed countries, but increases trust in developing and transition countries. In line with previous studies such as Dreher and Schneider (2006) the results support the usefulness of investigating cause and consequences of corruption in developed and developing countries separately. We also find that geographic identification affects trust in the UN. A stronger identification with the world as a whole leads to a higher trust in the UN. Moreover, we find the international environment a country faces to be a key factor as well. Countries' capacity to act globally by creating international networks guaranteeing information, goods and capital flows increases the demand for international stability, and the goal of avoiding a dangerous international environment supports international trust or in our case trust in UN. This aspect has been neglected in the previous literature. An interesting new data set by Dreher (2006) based on 23 variables allows to investigate this aspect. The results also show that not all dimensions of globalization affect trust in the same manner. Strong positive effects are observable for economic and political globalization or integration, but not for social globalization.

It is worthwhile to mention that one advantage of the data set is that different cultural regions can be investigated, i.e. we can assess the cross-culture robustness of our investigated variables in different environments. We find not only regional differences, namely a higher trust in the UN among developing and transition countries, but also certain differences among the determinants that shape trust in the UN.

We should note that the nature of trust in the UN might differ when we investigate different parts of the UN. Our question measures the general confidence in the UN, but it may be interesting to focus also on specific factors such as trust in the Secretary-General, the United Nations Secretariat, the General Assembly, the



Security Council, the Economic and Social Council, the Trusteeship Council or the International Court of Justice. The complex nature of the UN requires a multi-dimensional approach to fully understand the level of trust in such an international institution. Moreover, it would be highly interesting to observe the level of trust in the UN over time, as international organizations are also affected by changes. So, reforms are interesting aspects to investigate as, e.g., the proposals for an overhaul of the United Nations Secretariat Kofi Annan presented in March 2006. In his opinion the organization's rules, systems and culture need significant retooling and investment (<http://www.un.org/reform/>). If these reforms are realized, it will be highly interesting to investigate how such changes affect citizens' trust.

**Acknowledgments** For advice and suggestions thanks are due to Doris Aebi and two anonymous referees.

## Appendix

**Table 5** Description of variables

| Variable          | Derivation  |
|-------------------|---|
| Age               | Dummies<br>Age 30–49, Age 50–64, 65+ (reference group, Age < 30)  |
| Gender            | Female (Male in the reference group)  |
| Education         | Continuous variable<br>What is the highest educational level that you have attained?<br>1. No formal education<br>2. Incomplete primary school<br>3. Completed primary school<br>4. Incomplete secondary school: technical/vocational type<br>5. Complete secondary school: technical/vocational type<br>6. Incomplete secondary: university-preparatory type<br>7. Complete secondary: university-preparatory type<br>8. Some university-level education, without degree<br>9. University-level education, with degree   |
| Risk averse       | Now I would like to ask you something about the things which would seem to you personally, most important if you were looking a job. Here are some of the things many people take into account in relation to their work. Regardless of whether you're actually looking for a job, which one would you, personally, place first if you were looking for a job?<br>1. A good income so that you do not have any worries about money<br>2. A safe job with no risk of closing down or unemployment<br>3. Working with people you like<br>4. Doing an important job which gives you a feeling of accomplishment<br>And what would be your second choice?<br>A dummy variable was built with the value 1, if someone has chosen 2 as first or as second choice. |
| Church attendance | Apart from weddings, funerals, and christenings, about how often do you attend religious services these days? More than once a week, once a week, once a month, only on special holy days, once a year, less often, never or practically never. (7=more than once a week to 1=never or practically never)   |

**Table 5** (Continued)

| Variable  | Derivation  |
|---|---|
| Economic class                                  | People sometimes describe themselves as belonging to the working class, the middle class, or the upper or lower class. Would you describe yourself as belonging to the:<br>Dummy: Upper Class, the rest (middle class, working class and lower class) is the reference group.   |
| Employment status                               | Dummy: Selfemployed, the rest (unemployed, part time and full-time employed, at home, student, retired, other) is in the reference group.   |
| Corruption                                      | To assess the level of perceived corruption from the WVS, we use the following question:<br>How widespread do you think bribe taking and corruption is in this country?<br>Almost no public officials are engaged in it (1)<br>A few public officials are engaged in it (2)<br>Most public officials are engaged in it (3)<br>Almost all public officials are engaged in it (4) |
| Trust   | Generally speaking, would you say that most people can be trusted or that you can't be too careful in your dealings with people? (1=most people can be trusted, 0=can't be too careful).  |
| Trust in the system                             | Could you tell me how much confidence you have in the legal system: Do you have a great deal of confidence, quite a lot of confidence, not very much confidence or no confidence at all? (4=a great deal of confidence to 1=no confidence at all).  |
| Trust in government                             | Could you tell me how much confidence you have in the government in your capital: Do you have a great deal of confidence, quite a lot of confidence, not very much confidence or no confidence at all? (4=a great deal of confidence to 1=no confidence at all).  |
| Trust in parliament                             | Could you tell me how much confidence you have in parliament: Do you have a great deal of confidence, quite a lot of confidence, not very much confidence or no confidence at all? (4=a great deal of confidence to 1=no confidence at all).  |
| Trust in political parties                      | Could you tell me how much confidence you have in political parties: Do you have a great deal of confidence, quite a lot of confidence, not very much confidence or no confidence at all? (4=a great deal of confidence to 1=no confidence at all).   |
| Index trust in the state                        | Sum of all four trust in the state factors (scale from 1 to 16).  |
| Cosmopolitan(Geographic identity)               | To which of these geographic groups would you say you belong first of all?<br>Locality or town where you live (1)<br>State or region of country where you live (2)<br>Country as a whole (3)<br>Continent (4)<br>The world as a whole (5)   |
| Rightist political orientation                  | In political matters, people talk of "the left" and "the right." How would you place your views on this scale, generally speaking? Scale from 1 to 10.  |
| Overall globalization index                     | Data year 1995, covering the following dimensions: economic globalization, political globalization and social globalization (Dreher 2006)   |
| Economic globalization<br>(SOURCE: Dreher 2006) | (a) Data on actual flows<br>Trade (percent of GDP)<br>Foreign direct investment (percent of GDP)<br>Portfolio investment (percent of GDP)<br>Income payments to foreign nationals (percent of GDP)<br>(b) Data on restrictions<br>Hidden import barriers<br>Mean tariff rate  |

**Table 5** (Continued)

| Variable   | Derivation  |
|--|---|
| Political globalization<br>(SOURCE: Dreher 2006) | Taxes on international trade (percent of current revenue) |
|  | Capital account restrictions                              |
|  | Embassies in country                                      |
|  | Membership in international organizations                 |
| Social globalization<br>(SOURCE: Dreher 2006)    | Participation in U.N. Security Council Missions           |
|  | (a) Data on personal contact                              |
|  | Outgoing telephone traffic                                |
|  | Transfers (percent of GDP)                                |
|  | International tourism                                     |
|  | Telephone average cost of call to US                      |
|  | Foreign population (percent of total population)          |
|  | (b) Data on information flows                             |
|  | Telephone mainlines (per 1,000 people)                    |
|  | Internet hosts (per capita)                               |
|  | Internet users (share of population)                      |
|  | Cable television (per 1,000 people)                       |
|  | Daily newspapers (per 1,000 people)                       |
|  | Radios (per 1,000 people)                                 |
|  | (c) Data on cultural proximity                            |
|  | Number of McDonald's restaurants (per 100,000 people)     |

Source: Inglehart et al. (2000) and Dreher (2006).

**Table 6** Countries in the sample (38 countries)

| Countries          |                              |
|--------------------|------------------------------|
| Argentina          | Mexico                       |
| Armenia            | Moldova                      |
| Australia          | Nigeria                      |
| Azerbaijan         | Norway                       |
| Bangladesh         | Peru                         |
| Belarus            | Philippines                  |
| Bosnia-Herzegovina | Russia                       |
| Brazil             | Serbia                       |
| Bulgaria           | Slovenia                     |
| Chile              | South Korea                  |
| China              | Spain                        |
| Croatia            | Switzerland                  |
| Estonia            | Taiwan                       |
| Finland            | Ukraine                      |
| Georgia            | Uruguay                      |
| India              | USA                          |
| Latvia             | Venezuela                    |
| Lithuania          | Western Germany <sup>a</sup> |
| Macedonia          | Eastern Germany <sup>a</sup> |

<sup>a</sup> The data provides the possibility to differentiate between East and West Germany.

## References

- Abed, G. T., & Gupta, S. (Eds.) (2002). *Governance, corruption and economic performance*. Washington: International Monetary Fund.
- Aldrich, J. H., Sullivan, J. L., & Borgida, E. (1989). Foreign affairs and issue voting: Do president candidates 'waltz before a blind audience?' *American Political Science Review*, 83, 123–141.
- Alesina, A., & La Ferrara, E. (2002). Who trust others? *Journal of Public Economics*, 85, 207–234.
- Anderson, G. M., & Tollison, R. D. (1992). Morality and monopoly: The constitutional political economy of religious rules. *CATO Journal*, 13, 373–391.
- Bartels, L. (1995). The American public's defense spending preferences in the post-cold war era. *Public Opinion Quarterly*, 58, 479–508.
- Brewer, P. R., Aday, S., & Gross, K. (2005). Do Americans trust other nations? A panel study. *Social Science Quarterly*, 86, 36–51.
- Brewer, P. R., Gross, K., Aday, S., & Willnat, L. (2004). International trust and public opinion about world affairs. *American Journal of Political Science*, 48, 93–109.
- Brewer, P. R., & Steenbergen, M. R. (2002). All against all: How beliefs about human nature shape foreign policy opinions. *Political Psychology*, 23, 39–58.
- Conover, P. J., & Feldman, S. (1984). How people organize the political world: A schematic model. *American Journal of Political Science*, 28, 95–126.
- Dreher, A. (2006). Does globalization affect growth? Evidence from a new index of globalization. *Applied Economics*, 38, 1091–1110.
- Dreher, A., & Schneider, F. (2006). *Corruption and the shadow economy: An empirical analysis*. CREMA Working Paper 2006–1, Basel.
- Frey, B. S., & Stutzer, A. (2000). Happiness, economy and institutions. *Economic Journal*, 110, 918–938.
- Gambetta, D. (1988). *Trust, making and breaking cooperative relations*. Oxford: Blackwell.
- Glaeser, E., Laibson, D., Scheinkman, J. A., & Soutter, C. L. (2000). Measuring trust. *Quarterly Journal of Economics*, 115, 811–846.
- Hall, A., Rudebusch, G., & Wilcox, D. (1996). Judging instrument relevance in instrumental variable estimation. *International Economic Review*, 37, 283–298.
- Hardin, R. (1993). The street-level epistemology of trust. *Politics and Society*, 21, 505–531.
- Hartog, J., Ferrer-i-Carbonell, A., & Jonker, N. (2002). Linking measured risk aversion to individual characteristics. *Kyklos*, 55, 3–26.
- Hetherington, M. J. (1998). The political relevance of political trust. *American Political Science Review*, 92, 791–808.
- Hull, B. B., & Bold, F. (1994). Hell, religion, and cultural change. *Journal of Institutional and Theoretical Economics*, 150, 447–464.
- Iannaccone, L. R. (2002). A marriage made in heaven? Economic theory and religious studies. In S. Grossbard-Shechtman, & C. Clague (Eds.), *The expansion of economics* (pp. 163–193). New York: M.E. Sharpe.
- Inglehart, R., et al. (2000). *Codebook for world values survey*. Ann Arbor, MI: Institute for Social Research.
- Jackman, R. W., & Miller, R. A. (1998). Social capital and politics. *Annual Review of Political Science*, 1, 47–73.
- Kaufmann, D., Kraay, A., & Mastruzzi, M. (2003). *Governance matters III: Governance indicators for 1996–2002*. World Bank, June, 30.
- Knack, S. (1999). *Social capital and the quality of government: Evidence from the U.S. States*. World Bank Policy Research Working Paper Series: 2504.
- Knack, S., & Keefer, P. (1997). Does social capital have an economic payoff? A cross-country investigation. *Quarterly Journal of Economics*, 4, 1251–1288.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (1999). The quality of government. *Journal of Law, Economics, and Organization*, 15, 222–279.
- Levin, M., & Satarov, G. (2000). Corruption and institutions in Russia. *European Journal of Political Economy*, 16, 13–132.
- Miller, A. H. (1974). Political issues and trust in government: 1964–1970. *American Political Science Review*, 68, 951–971.
- Putnam, R. D. (1993). *Making democracy work. Civic traditions in modern Italy*. Princeton, NJ: Princeton University Press.

- Schaltegger, C. A., & Torgler, B. (2007). Government accountability and fiscal discipline: A panel analysis with Swiss data. *Journal of Public Economics*, 91, 117–140.
- Shapiro, R. Y., & Jacobs, L. W. (2000). Who leads and who follows? U.S. presidents, public opinion, and foreign policy. In B. L. Nacos, R. Y. Shapiro, & P. Isernia (Eds.), *Decision-making in a glass house: Mass media, public opinion, and American and European foreign policy in the 21st century* (pp. 223–245). New York: Rowan and Littlefield.
- Simon, H. A. (1955). A behavioral model of rational choice. *Quarterly Journal of Economics*, 69, 99–118.
- Sniderman, P. M., & Citrin, J. (1971). Psychological sources of political beliefs: Self-esteem and insolationist attitudes. *American Political Science Review*, 65, 401–417.
- Tanzi, V. (2002). Corruption around the world: Causes, consequences, scope, and cures. In G. T. Abed & S. Gupta (Eds.), *Governance, corruption and economic performance* (pp. 19–58). Washington: International Monetary Fund.
- Tittle, C. (1980) *Sanctions and social deviance: The question of deterrence*. New York: Praeger.
- Tittle, C., & Welch, M. (1983). Religiosity and deviance: Toward a contingency theory of constraining effects. *Social Forces*, 61, 653–682.
- Torgler, B. (2007). *Tax compliance and tax morale: A theoretical and empirical analysis*. Cheltenham, UK: Edward Elgar.
- Torgler, B., & García-Valiñas, M. A. (2007). The determinants of individuals' attitudes towards preventing environmental damage. *Ecological Economics*.
- Treisman, D., (2000). The cause of corruption: A cross-national study. *Journal of Public Economics*, 76, 399–457.
- Uslaner, E. M. (2002). *The moral foundation of trust*. Cambridge: Cambridge University Press.
- Woolcock, M. (1998). Social capital and economic development: Toward a theoretical synthesis and policy framework. *Theory and Society*, 27, 151–208.
- Zak, P. J., & Knack, S. (2001). Trust and growth. *Economic Journal*, 111, 295–321.